

In the Specification:

Please amend the specification as follows:

Under “*Field of the Invention*,” paragraph 1, please make the following amendment:

The present invention relates to a conveyor system, and more particularly, a method and apparatus for integrating a new or transferred pallet onto a conveyor of adjacently aligned ~~end-to-end~~ end-to-end pallets.

Under “*Summary of the Invention*,” paragraph 1, please make the following amendment:

The present invention relates to a method and apparatus for integrating a new or transferred pallet onto a conveyor system. The apparatus provides a first conveyor for carrying a plurality of pallets ~~end-to-end~~ end-to-end along a predetermined path of travel. A first motor is coupled to the first conveyor for driving the pallets at a first rate of speed. A first encoder is coupled to the first motor for monitoring the position of the last pallet on the first conveyor. A second conveyor is provided for introducing a new or transferred pallet to the first conveyor. A second motor is coupled to the second conveyor for driving the new or transferred pallet at a second rate of speed. A second encoder is coupled to the second motor for monitoring the position of the new pallet. A computer processor determines the relative positions of the last pallet on the first conveyor relative to the new or transferred pallet on the second conveyor. The computer processor also determines the second rate of speed in order for the new or transferred pallet to become adjacently aligned with the last pallet within a predetermined docking area. A controller adjusts the second rate of speed of the second motor in response to a signal from the computer processor.

Under “*Brief Description of the Drawings*” paragraph 1, please make the following amendment:

The description herein makes reference to the accompanying drawings wherein like reference numerals refer to like parts throughout several views, and ~~wherein~~ wherein:

Under “*Description of the Preferred Embodiment*” paragraph 9, please make the following amendment:

To prevent a gap from being created between the last skillet **16a** and the new skillet **24**, the new skillet **24** is integrated into the first conveyor **14** and will stop if it does not immediately engage a sensor **46** located at the end of the docking area **30**. When the new ~~skillet~~ skillet 24 reaches sensor **46**, as seen in Fig. 2f, the new skillet **24** should be adjacently aligned with the last skillet **16a**, and therefore, sensor **46** should be continuously actuated by the skillets **16a**, **24**. If sensor **46** is not actuated by the new skillet **24**, the new skillet **24** is stopped so as to prevent the ramming or bumping of new skillet **24** into the last skillet **16a**. A backup system is provided in a sensor **48** which is located further downstream the first conveyor **14** from sensor **46**. If sensor **48** becomes exposed, a fault is generated and indicated to the user that the new skillet **24** is not properly aligned with the last skillet **16a**.

Under “*Description of the Preferred Embodiment*” paragraph 10, please make the following amendment:

Fig. 3 shows the steps of integrating the new skillet **24** onto the first conveyor **14**. In operation, the first conveyor **14** of skillets **16** progresses forward at the first rate of speed, as seen in block **50**, as assemblers assemble the workpieces **12** on the skillets **16**. The last skillet **16a** passes sensor **34** and resets the first encoder **32**, as seen in block **52**. The new skillet **24** is introduced to the

first conveyor **14** through the lift **22**. When the last skillet **16a** reaches sensor **36**, the new skillet **24** is released from position **37**, as stated in block **54**. The new skillet **24** moves along the second conveyor **26** at the highest second rate of speed possible or at a predetermined upper level of the second rate of speed. When the new skillet **24** reaches sensor **34**, the second encoder **40** is reset to zero, as stated in block **56**. As the new skillet **24** continues to travel and reach the beginning of the docking area **30**, the computer processor **42** begins to calculate the second rate of speed of the new skillet **24** required for the new skillet **24** to become adjacently aligned with the last skillet **16a** within the docking area **30**. As seen in decision block **58**, the computer processor **42** first determines whether the last skillet **16a** and the new skillet **24** are within the docking area **30**. This is determined by subtracting the position of the last skillet **16a** from the position of the new skillet **24**. If the difference is greater than the docking area **30**, then the computer processor **42** continues to monitor the position of the skillets **16a**, **24** until the skillets **16a**, **24** are within the docking area **30**. Once the skillets **16a**, **24** are within the docking area **30**, then the ramp can be calculated, as seen in block **60**. The computer processor **42** utilizes the relative positions of the last skillet **16a** and the new skillet **24** along with the first rate of speed of the last skillet **16a** to determine the deceleration of the second rate of speed of the new skillet **24**, as seen in block **62**. The computer processor **42** provides a signal to the controller **14** which adjusts the variable ~~drive 20~~ drive 28 of the second conveyor **26**, as seen in block **64**. The speed of the new skillet **24** is continually reduced until the new skillet **24** becomes adjacently aligned with the last skillet **16a** whereby the new skillet **24** will assume the same rate of speed as the last skillet **16a**, as seen in block **66**. The new skillet **24** is then integrated into the first conveyor **14**, and the process is repeated by having yet another new skillet skillet 24 introduced onto the second conveyor **26**, as seen in block **68**.